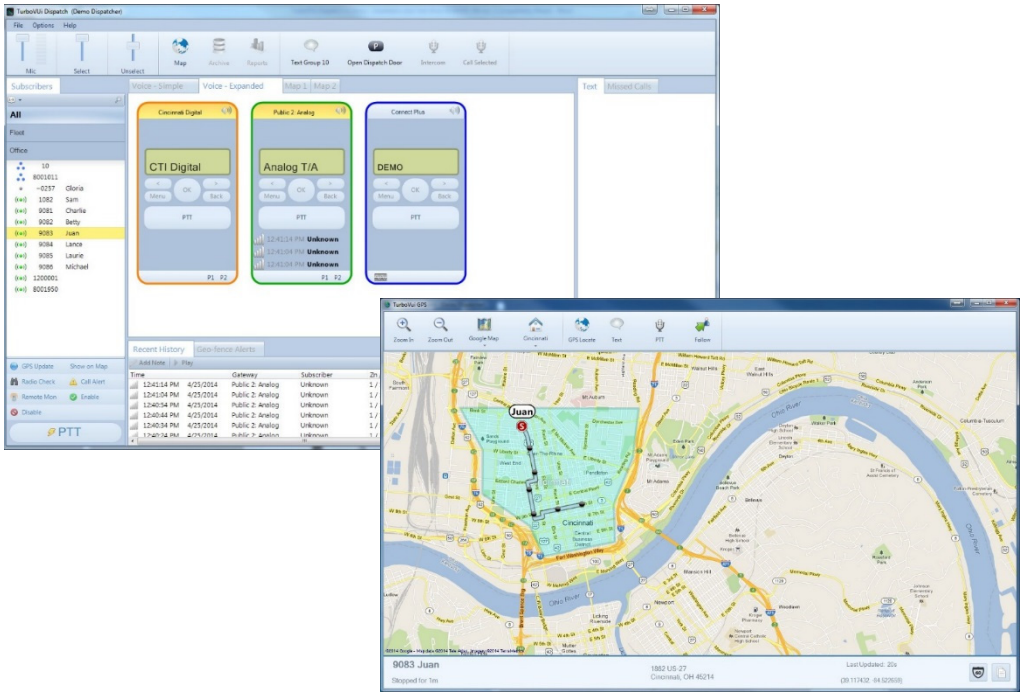
CTI Products

RadioPro™ Dispatch

Demo Installation and Test Drive



Document # R2-61570-710

For Version 7 Software

Contact Us

Support, replacement part ordering, and service may be arranged by contacting our Cincinnati office. Parts for service can be returned following request of a Return Material Authorization.

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Disclaimer

Information in this document is provided with best efforts for completeness and accuracy. However, no guarantee is expressed or implied, and details may change without notice.

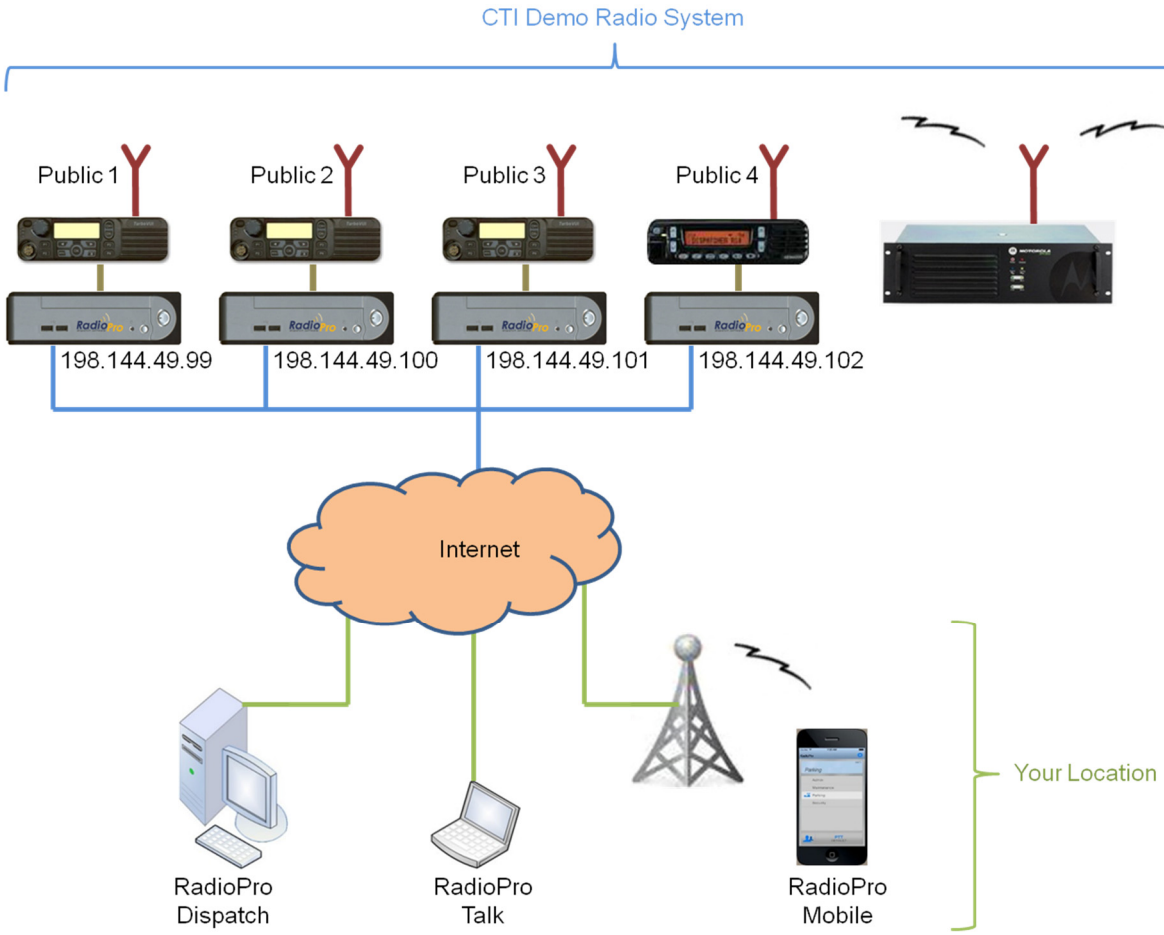
INTRODUCTION

A **RadioPro™** system provides remote access to 2-way radios via IP Networks. These types of systems are referred to as Dispatch over IP (DoIP). RadioPro is optimized for Motorola MOTOTRBO™ and Kenwood NEXEDGE® conventional and trunked radio systems. PC-based software allows voice communications between PC users and 2-way radio subscribers.

After installing the RadioPro Dispatch client on your PC using the instructions that follow, you will be able to connect with our demo radio system in Cincinnati. This full version of the software will allow you have voice conversations with others using the system, send and receive text messages, and track some of our mobile radio users using the GPS Map tabs. All features and functions are available; however, without a license key, connections can be made only to our demo radio system. Full customization of the Radio Controller windows is allowed when the "Edit" mode is entered, and will be discussed below.

DEMO RADIO SYSTEM IN CINCINNATI

The following diagram illustrates the general architecture of the Demo Radio System.



The following channels are available for communications using the above demo radio system.

Radio Name	Channel Type	IP Address	Function
Public 1	Motorola MOTOTRBO Digital Conventional	198.144.49.99	This is the primary communications channel for demos. We listen to this channel with Dispatch Client Software and also portable radios. Use this channel to communicate with us and others.
Public 2	Motorola MOTOTRBO Analog Conventional	198.144.49.100	This listen-only analog channel can be used to listen to live radio traffic in the Cincinnati area.
Public 3	Motorola MOTOTRBO Connect Plus	198.144.49.101	This talk group allows conversations over our Connect Plus radio system in Cincinnati.
Public 4	Kenwood NEXEDGE Digital Conventional	198.144.49.101	This talk group allows conversations over our NEXEDGE system.

WHAT YOU WILL NEED

PC for Dispatch Client

The PC that will be used to run the RadioPro Dispatch client software must have the following:

- Windows XP, Vista, 7, or 8 Operating System
- 4 GBytes Memory
- 1st Hard Disk, for Operating System
- 2nd Hard Disk, only if History Logging will be enabled
  This may be a second partition on the 1st Hard Disk, a second hard drive, or an external hard disk connected via USB or eSATA.
- IP Network Interface, 10Mbps or faster.
- .Net version 4.0. During installation of the Dispatch Client software, allow this update to occur.

Audio In/Out Devices

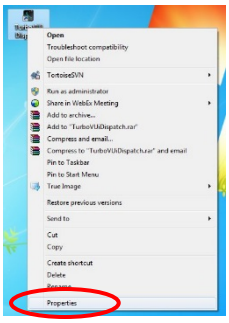
A microphone and speaker (or headset) is required if you wish to converse with others using our demo radio system. These devices can be connected to your PC or notebook via USB ports or analog audio connectors.

SOFTWARE INSTALLATION AND STARTUP

INSTALLATION

To install RadioPro Dispatch, use the following steps:

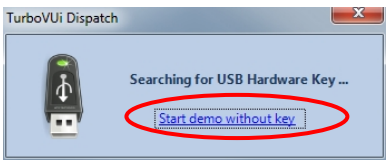
1. Before downloading the installation file in Step 2, use Windows Update to ensure that the host PC has been updated with the following:
    a. All "Important Updates"
    b. Any "Optional Updates" pertaining to Microsoft .Net.
2. Download and install the setup file from our web site:
   `http://www.ctiproducts.com/SoftwareDownloads/RadioPro/RadioPro_Dispatch_Setup_v708.exe`
3. The installer program will verify that certain programs are installed and up-to-date. If prompted, allow installation of Microsoft .NET Framework.
4. Some configuration functions may require the program to have "Administrator Privileges". Modify the way that this program runs by the using the following steps:
    a. Right-click on the RadioPro Dispatch icon located on your desktop to display the menu at right, then click on **Properties**.
    b. In the **Compatibility** tab, check the box for "Run this program as an administrator".



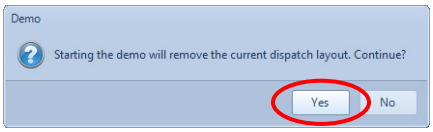
STARTUP

To start RadioPro Dispatch, use the following steps:

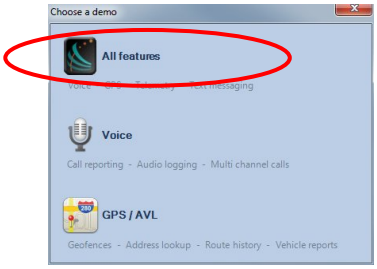
1. Double-click the RadioPro Dispatch icon on the PC desktop (since a USB License Key is not inserted, the window shown at right will be displayed), and then click **Start demo without key**.



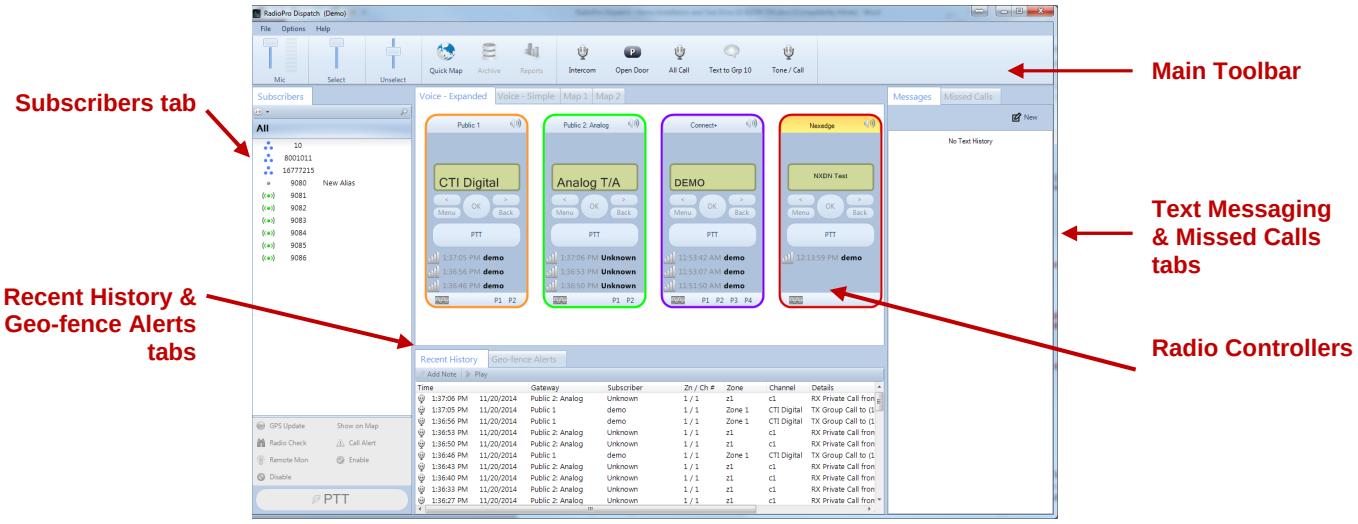
2. On the **Demo** confirmation window, click the **Yes** button to continue the demo.



3. On the **Choose a demo** window, click on **All Features**.


Choose a demo
All features
Voice
Call reporting - Audio logging - Multi channel calls
GPS / AVL
Geofences - Address lookup - Route history - Vehicle reports

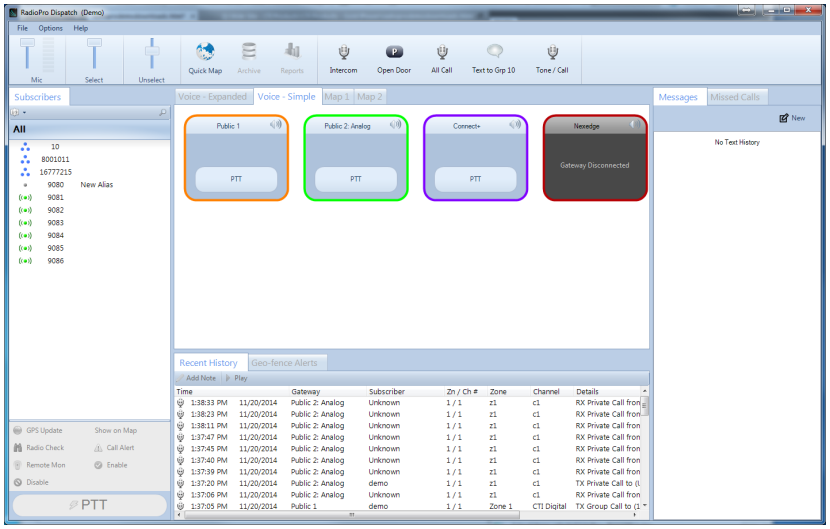
4. If you chose **All Features** or **Voice** in Step 3, the following Main window with Voice options will be displayed.



The Radio Controllers (channels) shown in the above layout are located in our Cincinnati office headquarters. This radio system is used only for demo purposes, and may or may not have radio voice traffic. In addition, one or more of these Radio Controllers may be offline (indicated when grayed-out), depending on the tests that we are currently performing. If radio traffic is needed, please call our main number (513-595-5900) and ask for Sales Support.

The **Voice - Expanded** tab shown above indicates four Radio Controllers with most of the features enabled. Besides a PTT button and radio status, other enabled features are radio display, radio menu buttons, history, channel steering, and 'P' buttons.

Radio Controllers may be configured to provide less functionality, and can be seen by clicking the **Voice – Simple** tab. As shown below, only the PPT button and radio status are provided for each controller on this tab to simplify the display.



As we are performing tests, a Radio Controller may be may be offline and indicated as shown above when the background is grayed-out.

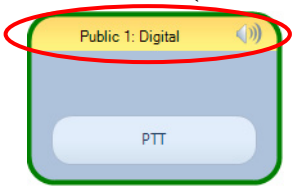
TEST DRIVE

RECEIVE AUDIO ADJUSTMENT

Begin by adjusting the PC's external speaker control knob to 50%. Then open the Windows operating system Volume Mixer by right-clicking the speaker icon in the system tray. Click on **Playback Devices**, double-click the needed "playback device", and then adjust the sliders to 100% on the **Levels** tab.

Further adjustment to *Receive Audio* should not be required. But if needed, there are various ways to adjust incoming volume:

- For any **Radio Controller** window, click on the speaker icon in the **Radio Controller** window header to show the volume slider for this Channel. Click and drag the slider to the desired level. (These should normally be set to maximum.) Double-click the speaker icon to toggle between mute and un-mute states.
- To adjust *Selected* and *Unselected* volume levels, click on the **Select** or **Unselect** volume sliders on the **Main Toolbar**. Click and drag the slider to the desired level. (**Select** volume should be set to maximum. **Unselect** volume should be set between 50% and maximum.) A talk group can be "Selected" by clicking on the Radio Controller header area to highlight it in yellow as indicated at right. If it is desired to select multiple talk groups, then hold down the **Ctrl** key on the keyboard while clicking the Radio Controller headers.



TRANSMIT AUDIO ADJUSTMENT

For optimum sound level while transmitting while activating a PTT button, the **Mic** level meter should display 1 to 5 bars. If there is less than 1 bar, the sound level is not high enough. If there are more than 5 bars, then distortion in your voice may occur.

To adjust the microphone transmit audio level, open the Windows operating system Volume Mixer by right-clicking the speaker icon in the system tray.

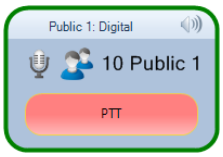
- For Windows 7 or 8, choose **Recording Devices** from the drop-down list. On the **Recording** tab, double-click the appropriate mic, and then adjust the slider on the **Levels** tab to 100%.
- For Windows XP, choose **Open Volume Control**. In the **Master Volume** window, choose **Properties** from the **Options** menu. In the **Mixer Device** list, select the appropriate microphone, then click the **OK** button. Adjust the slider to 100%.

INITIATING A VOICE CALL

There are various ways to initiate a Voice Call:

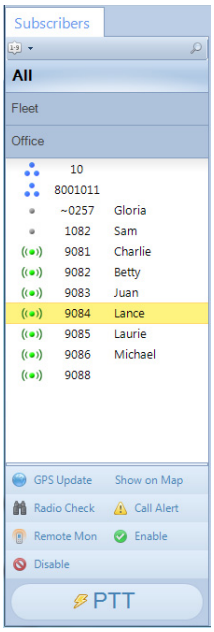
Group Calls using the Radio Controller PTT

Use the PC's mouse to click and hold the **PPT** button on the "Public 1" **Radio Controller**. Wait for the "go-ahead" tone and the PTT button to change to a red background (see example at right), and then speak into the mic. (This action can also be initiated with a touch-screen, or a PTT button on a desk mic or footswitch if available.)



Group or Private Calls using the Subscriber Tab

To initiate a group or private voice call using the **Subscribers** tab, click a Group or Private subscriber in the **Subscribers** tab, and then click and hold the **PTT** button at the bottom of this tab while speaking into a mic. (This action can also be initiated with a touch-screen, or a PTT button on a desk mic or footswitch.)



INITIATING A TEXT MESSAGE

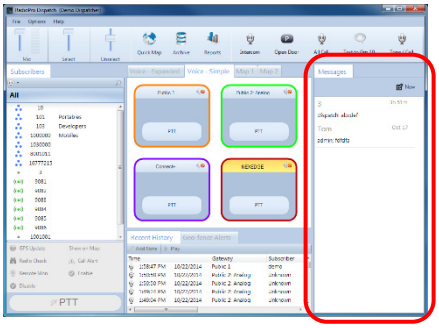
Use the **Messages** panel to send and receive text messages between this PC and a radio users. It is designed to function similar to messaging found on a smart mobile device. Two views are available.

Main Message View

Main Message View is the default view and shows the last conversation for each radio subscriber, with the most current conversation at the top.

A conversation can be started by clicking the New button. In the **New Text Message** box, choose one or more recipients, and choose an option for **When to send** from the drop-down list. Finally, type the message, and then click the Send button. The new message will be displayed in the ***Main Message View*** as a conversation. Message status displayed along with the message include:

- Sending
- Pending
- No acknowledgement



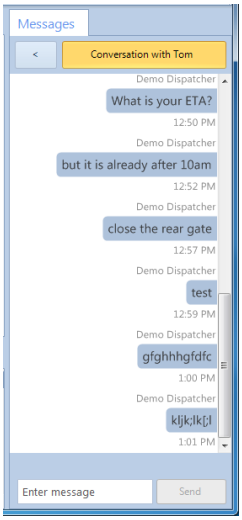
A message that was sent successfully will display the elapsed time from being sent.

Conversation View

Click one of the conversations on the ***Main Message View*** to see the details of a ***Conversation***. In the ***Conversation View***, all messages with the selected radio or radio group will be displayed, along with status information for each message.

Use the < button to go back to the ***Main Message View***.

To add a reply to this conversion, type the reply into the **Enter Message** text box, and then press the Send button.



SUBSCRIBERS TAB - TOOLS AND TIPS

- Click the Sort Button to toggle between lowest-to-highest and highest-to-lowest.
- Click the down arrow next to the Sort Button to toggle sorting of subscribers by ID and by alias name.
- To find a subscriber in a long list, click the **Search** icon , and then start typing the first characters of the Radio ID or Alias Name. Those Radio IDs or Alias Names containing those characters will be displayed.

RECENT HISTORY TAB - TOOLS AND TIPS

The **Recent History** tab includes the previous 50 events of the radio system, including voice, text, and other events such as Emergency and Call Alerts. A configuration option allows a maximum of 500 events to be displayed in this tab.

Saving of the voice files is not activated in this demo version of the software, and therefore they cannot be replayed. To configure the software for recording and playback, see section "***History Logging Sub-folder***" in the "Dispatch Client Software Installation Guide – R2-61785".

GPS MAP TAB(S) - TOOLS AND TIPS

GPS map tabs are configured during installation and occupy a space on the desktop determined by the Site Administrator. They can be configured to be docked to the Main Window using tabs (as this demo shows) or can be configured to be un-docked in separate windows. The demo is configured to show two maps docked to the Main window as follows:

- Map 1 uses Google Map view to show streets in the Cincinnati area.
- Map 2 uses Bing Satellite view to show a similar area.

An optional map may also be viewed by clicking the Quick Map button on the Main Toolbar. Several differences exist between the Main Window Maps and the Quick Map as indicated in the table below.

	Main Window Map(s)	Quick Map
Quantity	Multiple	1
Center feature	Yes	No
Visibility feature	Yes	No

To show the most versatility, click on the **Map 1** tab to display the Google Map view of Cincinnati. Then try some of the following features:

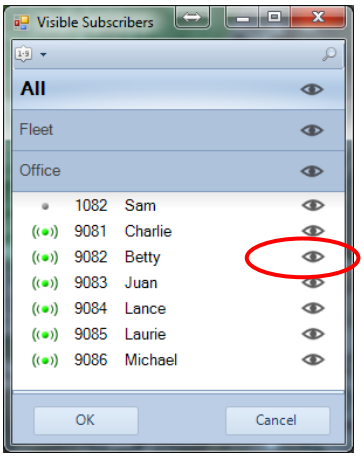
- Subscriber Details:
    1. Select a subscriber, either by clicking on an icon on the map or a subscriber in the ***Subscribers*** tab. Note that the current position of the selected subscriber is a green circle to indicate movement, and a red stop sign to indicate stopped.
    2. Notice that Trail Crumbs are shown for this selected subscriber for the last 30 minutes. (This time is configurable.) Hover over any grey circle to show date, time, and speed for this subscriber at this point.
    3. View detailed information for this subscriber in the ***Subscriber Status Bar*** located at the bottom of the map. Information will include street address, rate of travel (or stopped time), and time since last GPS update.
    4. Click the icon to open ***Google Street View*** to see the features that a subscriber could see at this location.

5. Click the icon to copy the information in this ***Subscriber Status Bar*** to the Windows ***Clipboard***. This information may then be pasted into other applications, such as email, text messaging, and Microsoft Office.

- Subsriber Actions:
  1. Select a subscriber, either by clicking on an icon on the map or a subscriber in the ***Subscribers*** tab.
  2. Use the **PTT** button at the bottom of the ***Subscribers*** tab to make a private call to this subscriber.
  3. While a subscriber is selected, the ***Text*** tab can be used to send a private text message to this selected subscriber.

- Toolbar buttons:

1. ***Visibility*** button: Click this button to select which subscribers should be visible on the selected map. A window will be displayed that looks very similar to the ***Subscribers*** tab. However, the ***Visible Subscribers*** tab adds control for visibility. Visibility may be toggled on and off individually by clicking a subscriber's visibility icon as shown at right, or as a group by clicking the icon for that group. Three versions of this symbol will indicate visiblity as indicated below:

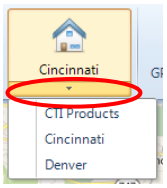


Symbol	Groups	Subscribers
	All members are visible	Subscriber is visible
	Some members are visible	
	No members are visible	Subscriber is not visible

2. ***Center*** button: Click this button to zoom and reposition the map in order to show all visible subscribers on the selected map.

3. ***Follow*** button: Click this button to keep the selected subscriber centered in the selected map.

4. ***Map Presets*** button: Click the top portion of this button to return the selected map to the indicated preset as configured by the Site Administrator.



Click the arrow on the lower portion of this button to list other presets that have been configured by the Site Administrator. Click on one of the items in the list to switch the selected map to a new preset.

5. ***Map Type*** button: Click the arrow on the lower portion of this button to list Map Types that have been enabled by the Site Administrator.

ARCHIVED HISTORY WINDOW - TOOLS AND TIPS

Voice and event logging can only occur if Logging is enabled. A storage location for logging audio and radio events must be chosen that is a different disk partition than the one used for the Operating System of the PC. Usually, this is a second internal or external hard disk. To configure the software for recording and playback, see section "***History Logging Sub-folder***" in "Dispatch Client Software Installation Guide – R2-61785".